

I Claim:

A method for improving the internal computer throughput rate of network communicated data comprising:

transferring network communicated data from a standard network interface device to an application address space with only one physical copying of the data;

executing communication protocols in an integrated protocol processing loop by having the integrated protocol processing loop perform all protocol data manipulation functions on the data in a single loop on computer word size segments of the data;

calculating communication protocol checksums one computer word size of data at a time within the integrated protocol processing loop; and

address mapping of the data occurs in response to call functions, where the operating system's calls are bypassed.